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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,870	10/24/2005	Edgar Evert Steenwinkel	ACH2970US	8011

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EXAMINER	
PARSA, JAFAR F	

ART UNIT	PAPER NUMBER
1621	

DATE MAILED: 03/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/533,870	STEENWINKEL ET AL.	
	Examiner	Art Unit	
	Jafar Parsa	1621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 October 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10/24/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

Claim Rejections - 35 USC § 112

Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "second step and third step" in claim 6 renders the claim indefinite. The term "second and third step" are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The instant claims fail to define what is the first step is before reciting the second and third step. It is not clear that if the second step is referring to the Fischer-Tropsch synthesis reaction or the catalytic cracking of the hydrocarbons made by the Fischer-Tropsch synthesis reaction.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5, 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Gangwal et al (USPN 5,928,980).

Gangwal teaches a process for the conversion of hydrogen and carbon monoxide to C5+ hydrocarbon mixtures by contacting the synthesis gas with a Fischer-Tropsch catalyst containing catalytic cracking catalyst. See Example 2. The spent fluid catalytic cracking catalyst is impregnated with a cobalt and/or iron salt to shape the catalyst system to be utilized in the Fischer-Tropsch synthesis reaction. See col. 4, lines 1-5.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 3, 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gangwal et al (USPN 5,928,980) as applied to claims 1, 2, 5, 7-10 above, and further in view of Budge et al (USPN 4665042).

Applicants' claimed invention is directed to a Fischer-Tropsch process for the conversion of carbon monoxide and hydrogen to Cs+ hydrocarbon mixtures in which

process use is made of Fischer-Tropsch catalyst particles and fluid catalytic cracking (FCC) catalyst particles. The Fischer-Tropsch catalyst particles and the fluid catalytic particles are dosed individually at the same or different rate.

Gangwal teaches a process for the conversion of hydrogen and carbon monoxide to C5+ hydrocarbon mixtures by contacting the synthesis gas with a Fischer-Tropsch catalyst containing catalytic cracking catalyst. See Example 2. The spent fluid catalytic cracking catalyst is impregnated with a cobalt and/or iron salt to shape the catalyst system to be utilized in the Fischer-Tropsch synthesis reaction. See col. 4, lines 1-5.

The difference between Gangwal and the claimed invention is that the instant claims require adding the Fischer-Tropsch catalyst particles and the fluid catalytic particles individually at the same or different rate. However, Budge teaches that in order to reduce the wax content of the Fischer-Tropsch products. It has been previously proposed to either incorporate with the Fischer-Tropsch catalyst a cracking component such as a Zeolite or to pass the product from the Fischer-Tropsch catalyst over a cracking catalyst in a separate stage (col. 1, lines 28-33). It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to add an effective amount of the Fischer-Tropsch catalyst particles and the fluid catalytic particles individually or together at the same or different rate, in order to reduce the wax content of the Fischer-Tropsch product as suggested by Budge et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jafar Parsa whose telephone number is (571)272-0643. The examiner can normally be reached on 8 a.m.-4:30 p.m. (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on (571)272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jafar Parsa
Primary Examiner
Art Unit 1621

JP

J. PARSA
PRIMARY EXAMINER